

REVIEW GUIDELINES FOR CONSTRUCTION OF JOINTLESS BRIDGES

1. Is there a specified construction sequence for integral abutments (steel and prestressed concrete superstructure)?
2. Is there special guidance for construction inspectors on jointless bridge or integral abutment construction?
3. Provide construction details for a typical jointless bridge.
4. Are there provisions for controlling embankment construction such as sequence?
5. What are the procedures for backfill placement at both ends, including temperature considerations, gradation.
6. Provisions for controlling concrete placement for end diaphragms and precautions such as for temperature.
7. What are the requirements for controlling placement of concrete for approach slabs-superstructure connections and deck slab concrete.
8. Provide comments on experience of construction advantages over conventional jointed bridge construction.
9. Retrofit considerations for converting jointed bridges to jointless construction, simple spans to continuous and eliminating joints.
10. Do you have pressure relief joint provisions and details with good performance.
11. Suggestions or recommendations for improvement?

REVIEW GUIDELINES FOR CONSTRUCTION OF BRIDGE EXPANSION JOINTS

1. Do you perform fabrication inspection of joint systems and components, required certifications and what is documented?
2. Are shop drawings for joints reviewed and is a checklist used?
3. Are there provisions to accommodate settlement or other construction movements prior to deck joint installation?
4. Are the prepared areas inspected prior to installing joint system and hardware?
5. Are there requirements for keeping sealed joint systems protected from damage, debris and exposure prior to installation?
6. Are detailed installation instructions provided from the manufacturer including required installation widths for probable installation temperatures.
7. Are temporary support devices furnished to keep joints in proper position until permanent connections made or until concrete has achieved initial set? Temporary connections are released as soon as it is acceptable?
8. Details and installation instructions for transverse field splices for staged construction where practical.
9. Are there fatigue load test requirements for prequalification of particular joint systems?
10. Recommendations for improvement in construction of expansion joints?